The Procter & Gamble/University of Cincinnati Simulation Center
THE PROJECT

The University of Cincinnati and The Procter & Gamble Company have developed a strategic partnership for development of modeling and simulation capabilities for advancing product development and manufacturing processes. The resulting P&G/UC Simulation Center is a true experiential learning center, where students further their education by working directly on industry problems alongside researchers from P&G who are responsible for creating innovations to propel the business forward.

This major partnership leverages UC’s faculty and students to deploy modeling and simulation capabilities across real projects in R&D and Product Supply for P&G. The Center brings together Procter and Gamble’s status as the world’s largest consumer goods company with the University of Cincinnati’s world class expertise in structural mechanics and dynamics, computational fluid dynamics, and other modeling disciplines in engineering and science. The Center could not have been developed without this strong University-Industry dynamic in place and the assets and needs that each bring to the project.

TAKING PARTNERSHIP TO A NEW LEVEL

The P&G/UC Simulation Center idea was originally a direct reapplication of what Caterpillar launched with the University of Illinois (UIUC), called the Champaign Simulation Center (CSC). However, there are several unique features that have been important in the P&G/UC success. The P&G/UC partnership was structured so that UC ‘owns’ the P&G/UC Simulation Center, whereas Caterpillar ‘owned’ the CSC. In addition, the physical location of the Center is on the edge of the University Campus rather than at the P&G facilities for easy access for students and faculty to work on projects during any open schedule opportunities. These approaches, along with providing clear guidelines for IP ownership and having on-site relationship leaders from both P&G and UC, allow students, faculty and researchers to focus on individual projects and areas of expertise without disruption.

IMPACT

This public-private partnership and its outcomes directly address economic impact in terms of advancing innovation, new product development for the marketplace, and workforce training. The P&G/UC Simulation Center has participation of project teams from across the company, with many project teams becoming “repeat customers.” Students are supporting new-to-the-world modeling capability developments inspired by P&G’s industrial challenges. Models developed at
the Simulation Center are being applied to disruptive innovations across the company to support market introduction of transformational and sustaining technological innovations. To date, more than 60 projects have gone through the Simulation Center, which has resulted in nearly $5M in direct funding from P&G. Numerous publications and conference presentations have also resulted from work at the Simulation Center. Students who work at the center have contributed to meaningful innovations for P&G, leading to intellectual property development and measurable business benefits for the company.

As of early 2013, P&G has hired 10 out of the 110 UC students that have worked at the P&G/UC Simulation Center—a significant number, given the challenging economic times. P&G sees this as a strategic relationship to train talented researchers who “hit the ground running on day one” at P&G. Students gain valuable, industry-relevant skills through the combined mentorship of industry and university experts, making them attractive job candidates for P&G and other companies.

P&G has continually increased funding to the Simulation Center as a result of successful projects. In late 2012, P&G and UC agreed to a five year, $5 million base funding level ($1 million per year). **P&G estimates that this partnership has provided them with greater than a 7x return in business impact on their investment.** P&G is working with UC to seek additional funding through state and federal opportunities to continue to grow this initiative.

**ADDRESSING BARRIERS AND SUCCESS FACTORS**

The negotiation of Intellectual Property Rights was addressed up front, with a goal of establishing policies that are a win for both sides. In this partnership, P&G has exclusivity to the intellectual properties developed in the course of the project work, but UC faculty and students retain the ownership of prior technology used for the project, as well as for applications outside of P&G interests. This agreement is progressive and one that has enabled the Center to flourish.

The right leadership is always an issue in achieving success. Both P&G and UC made it an early priority to identify highly committed leaders from both sides who would work collaboratively to share risk and benefit, think outside the box and follow-through on commitments.

Bureaucracy issues are often problematic in establishing highly complex initiatives that involve financial, intellectual property, operating, and lease agreements. The resulting frustrations and delays affect relationship building, especially when the relationship is in its early stage of development. While these issues had to be navigated, use of the UC-P&G Master Agreement mitigated many of these issues. Ultimately, success was achieved through very deliberate setups, including deployment of full-time managers from UC and P&G, clear support from both upper managements and commitment on both sides to stay focused on the goal and think creatively to address the challenges that might arise. In fact, the planning team never lost sight of the need to focus on the core win-win outcomes that were driving the project. The experience of P&G in working with universities through its Connect+Develop Program was also beneficial to the
negotiation process. Their best practices for leveraging external resources to drive discontinuous, sustainable innovation and productivity provided a success model upon which to build.

**IMPACTS BEYOND THE CENTER: AFFECTING LIVES**

The success of the P&G/UC Simulation Center demonstrates how initiatives such as this can develop global innovation partnerships that create a win-win-win for both partners and the consumer. P&G’s purpose is to provide branded products and services of superior quality and value that improve the lives of the world’s consumers, now and for generations to come. The P&G/UC simulation center directly supports this purpose.


Website: [http://www.min.uc.edu/ucsc/](http://www.min.uc.edu/ucsc/)

Tags: Innovation, Talent, Place

Sub-categories: A novel program/activity designed to impact innovation and economy; a particularly productive collaboration with industry.